# Functional Requirements
## Account Creation

| Tag | Requirement Description |
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| REQ-1 | A Public User (PU) must be able to create a user account with the application. |
| REQ-1.1 | A PU must be able to access the homepage of the application. |
| REQ-1.1.1 | The login page must contain an "Account" button. |
| REQ-1.1.2 | A PU must be able to access the "Account" button. |
| REQ-1.1.3 | A PU must be redirected to a signup page after clicking the "Create a new account" link. |
| REQ-1.2 | A PU must be able to enter a valid email address. |
| REQ-1.2.1 | The email address must have a valid format which consists of a username followed by an '@' symbol and a domain name. E.g. xyz@domain.com. |
| REQ-1.2.1.1 | If the email address does not comply with the format stated in REQ-1.2.1, the application will inform the PU that the email address entered is invalid. |
| REQ-1.3 | A PU must be able to enter a valid password. |
| REQ-1.3.1 | A PU must type his/her password twice, once in the 'Password' field and once in the "Retype Password" field |
| REQ-1.3.1.1 | If the password in the "Retype Password" field does not match the 'Password' field, the application must inform the PU that the passwords do not match. |
| REQ-1.3.2 | A password must be at least twelve (12) characters long and consist of at least one (1) uppercase letter, one (1) lowercase letter, one (1) number, and one(1) special character. |
| REQ-1.3.2.1 | If the password entered does not comply with the complexity rules in REQ-1.3.2, the application must inform the PU that the password is too weak and request the PU to re-enter another password. |
| REQ-1.4 | The PU must tick the "Accept Terms and Conditions" checkbox of the application. |
| REQ-1.5 | The PU must click the "Create an account" after completing the form. |

| REQ-1.5.1 | The PU is unable to click "Create an account" if the email address provided is invalid. |
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| REQ-1.5.2 | The PU is unable to click "Create an account" if the password provided is invalid. |
| REQ-1.5.3 | The PU is unable to click "Create an account" if the "Terms and Conditions" tick box is not ticked according to REQ-1.4. |
| REQ-1.6 | The Application must inform the PU of the status of the account creation through a pop-up message. |
| REQ-1.6.1 | If the account creation is successful, the Application must inform the PU that the account creation is successful. |
| REQ-1.6.1.1 | The application must display a "Continue to Login" button in the pop-up message. |
| REQ-1.6.1.1.1 | The application must redirect the PU to the login page when the Account Holder (AH) clicks "Continue to Login". |
| REQ-1.6.2 | If the account creation is unsuccessful, the application must inform the PU that the account creation is unsuccessful. |
| REQ-1.6.2.1 | The application must display a "Please Try Again" button in the pop-up message. |
| REQ-1.6.2.1.1 | The application must close the pop-up message when the Account Holder clicks "Try again". |
| REQ-1.6.2.1.2 | The application must clear the "Password" field. |
| REQ-1.6.2.1.3 | The application must clear the "Retype Password" field. |
| REQ-1.6.2.1.4 | The application must clear the checkbox. |
| REQ-1.6.2.1.5 | The PU must be able to edit his/her email address. |
| REQ-1.6.2.1.6 | The PU must be able to re-enter his/ her password in both the "Password " and "Retype Password" fields. |
| REQ-1.6.2.1.7 | The PU must be able to check the checkbox again. |
| REQ-1.6.2.1.8 | The PU must be able to re-attempt account creation by clicking "Create an Account". |

# Logging in

| Tags | Requirements |
|---|---|
| REQ-2 | The Account Holder (AH) must be able to log in to the application. |
| REQ-2.1 | An AH must be able to access the homepage of the application. |
| REQ-2.2 | An AH must be able to access the "Log In" button. |
| REQ-2.3 | After clicking the "Log in" button, the application must be able to redirect the AH to the account login page. |
| REQ-2.4 | An AH must be able to enter his/her email address. |
| REQ-2.5 | An AH must be able to enter his/her password. |
| REQ-2.6 | An AH must only be able to click "Login" after completing the form. |
| REQ-2.7 | An AH must only be able to click "Login" after he/she entered his/her email address. |
| REQ-2.8 | An AH must be able to click "Login" after he/she entered his/her password. |
| REQ-2.9 | Upon successful logging in, an AH must be directed to his/her homepage. |
| REQ-2.10 | Should the login fail, the application must notify the AH through a pop-up message "Login failed due to incorrect email address or password". |
| REQ-2.10.1 | The application must not explicitly inform the AH which information is incorrect. |
| REQ-2.10.2 | The Application must display a "Please Re-enter Your Email and Password" pop-up message to the AH. |
| REQ-2.11 | The Application must close the "Please Enter Your Email and Password" pop-up message after the AH clicks the "X" icon on the top right of the pop-up message. |
| REQ-2.11.1 | The password and email field must be cleared |
| REQ-2.11.2 | The AH must be able to reenter his/her email address. |

# Logging in

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| REQ-2.11.3 | The AH must be able to reenter his/her password. |
| REQ-2.11.4 | The AH must be able to reattempt logging in by clicking "Login". |

## Changing password

| Tags | Requirements |
|---|---|
| REQ-3.1 | Account Holders (AH) must be able to change their passwords. |
| REQ-3.2 | AH must be able to login into their respective accounts in the application |
| REQ-3.3 | After logging in, AH must be able to click "Account" on their Homepage |
| REQ-3.4 | After clicking "Account", AH must be redirected to the Account Settings page. |
| REQ-3.5 | AH must be able to click "Change Password" on the Account settings page. |
| REQ-3.5.1 | The application must display a form to change the password. |
| REQ-3.5.2 | The form must include the fields "Current Password", "New Password" and "Retype New Password". |
| REQ-3.5.2.1 | AH must be able to type in "Current Password". |
| REQ-3.5.2.2 | AH must be able to type in "New Password". |
| REQ-3.5.2.3 | AH must be able to type in "Retype New Password". |
| REQ-3.5.2.4 | AH must not reuse a previously used password. |
| REQ-3.5.2.5 | AH must be able to type the same password for both the "New Password" and "Old Password" fields i.e. Passwords must match. |

| REQ-3.6 | AH must be able to click the "Submit" button after completing the form. |
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| REQ-3.6.1 | AH must not be able to click the "Submit" button if passwords from the "New Password" and "Retype New Password" fields do not match |
| REQ-3.6.2 | AH must not be able to click the "Submit" button if the password in the "Current Password" field does not match their actual current password. |
| REQ-3.7 | Application must notify AH that the password reset is successful through a pop-up message "Password Successfully Changed" after clicking the "Submit" button. |

## Resetting password (Forgot Password)

| Tags | Requirement Description |
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| REQ-4 | Account Holder (AH) must be able to reset the password. |
| REQ-4.1 | AH must be able to click the "Forgot Password" link on the login page |
| REQ-4.2 | Application must be able to redirect AH to the password reset page after clicking "Forgot Password". |
| REQ-4.3 | AH must be able to enter his/her email address on the password reset page. |
| REQ-4.3.1 | AH must be able to click the "Reset Password" after entering their email. |
| REQ-4.4 | Application must be able to inform AH that a password reset email has been sent to the email in REQ-1.3. |
| REQ-4.4.1 | The application must present a pop-up message "Password reset email has been sent" after "Reset Password" is clicked. |
| REQ-4.4.2 | The password reset email must contain a link that will redirect the AH to the password reset page. |
| REQ-4.4.3 | An AH must be able to be redirected to the password reset page after clicking on the password reset link. |
| REQ-4.5 | On the password reset page, an AH must be able to enter his/her new password. |
| REQ- | Password requirements will follow that of REQ-1.3.1.1 to REQ-1.3.2.1. |

| 4.5.1 | |
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| REQ-4.6 | An AH must be able to enter his/her password under the "Enter New Password" field. |
| REQ-4.7 | An AH must be able to enter his/her new password under the "Retype New Password" field. |
| REQ-4.8 | AH must enter the same password for both the "Enter New Password" and "Retype New Password" fields. |
| REQ-4.9 | AH must not be able to enter his/her new password if the password reset request is no longer valid. |
| REQ-4.9.1 | Application must inform the AH that his/her password reset email has expired. |
| REQ-4.10 | AH must be able to click "Submit" after completing the form. |
| REQ-4.10.1 | AH must not be able to click "Submit" if the password under "Enter New Password" and "Retype New Password" is not the same. |
| REQ-4.10.2 | AH must not be able to click "Submit" if either "Enter New Password" or "Retype New Password" is empty. |
| REQ-4.11 | The Application must inform the AH that the password reset is successful through a pop-up message "Password Reset Successful". |

## Selecting Dietary Restrictions

| Tags | Requirement Description |
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| REQ-5 | An Account Holder (AH) must be able to select dietary restrictions of their choosing. |
| REQ-5.1 | An AH must be able to access the homepage before selecting dietary restrictions. |
| REQ-5.2 | The application must display icons of dietary restrictions. |
| REQ-5.2.1 | The application must display the Vegan icon with a tick box below. |
| REQ-5.2.2 | The application must display the Vegetarian icon with a tick box below. |
| REQ-5.2.3 | The application must display the lactose-free icon with a tick box |

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| | below. |
| REQ-5.2.4 | The application must display the gluten-free icon with a tick box below. |
| REQ-5.3 | An AH must be able to tick the dietary restriction from REQ-5.2. |
| REQ-5.4 | After ticking any dietary restriction, the live map on the homepage must be updated with icons of restaurants that adhere to REQ5.2.1 to REQ 5.2.4 |
| REQ-5.4.1 | If no dietary restriction was selected, all restaurants within the vicinity will be displayed on the live map. |

## Searching Restaurants

| Tags | Requirements Description |
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| REQ-6 | The Account Holder (AH) must be able to search for restaurants based on distance, ratings, selected Dietary Restriction (DR), and restaurant name. |
| REQ-6.1 | AH must be able to click on the "Search Restaurants" button on the homepage. |
| REQ-6.2 | The AH must be able to select either one (1) of "Distance" or "Rating" (AH can select both or none as well). |
| REQ-6.2.1 | If "Distance" is selected by AH, the application must sort restaurants from nearest to furthest based on DR. |
| REQ-6.2.2 | If "Ratings" is selected by AH, the application must sort restaurants from the highest ratings to the lowest ratings based on DR. |
| REQ-6.2.3 | If both "Distance" and "Ratings" are selected by AH, the application must sort restaurants from nearest to farthest and highest ratings to lowest ratings based on DR. |
| REQ-6.3 | AH must be able to enter the restaurant name in the search bar. |
| REQ-6.3.1 | If a restaurant name is entered, the search bar would display a list of restaurants that matches the entered name. |

## Viewing Community Page

| Tags | Requirement Description |
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| REQ-7 | Account Holder (AH) must be able to view the community page. |
| REQ-7.1 | AH must log in first before viewing the community page. |
| REQ-7.2 | AH must be able to click "View Community Page" at their homepage. |
| REQ-7.3 | After clicking "View Community Page", the application must be able to redirect AH to the "Community Page" webpage. |
| REQ-7.4 | Application must be able to display posts from different users in the "Community Page" webpage. |

## Sharing On Community Page

| Tags | Requirement Description |
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| REQ-8 | Account Holder(AH) must be able to share a post on the community page. |
| REQ-8.1 | AH must be able to click the "New Post" button on the community page. |
| REQ-8.2 | Application must be able to display a form for the AH to fill in their post. |
| REQ-8.2.1 | AH must be able to attach images in the form. |
| REQ-8.2.2 | AH must be able to type in characters in the form. |
| REQ-8.2.3 | AH must be able to attach video files in the form. |
| REQ-8.3 | AH must fill in the "Title" field of the form |
| REQ-8.4 | AH must not be able to click "POST!" if the "Title" field of the form is empty. |

| REQ-8.5 | AH must only be able to click "POST!" if at least one (1) requirement from REQ-8.2.1 to REQ-8.2.3 is fulfilled. |
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| REQ-8.6 | After clicking "POST!", a pop-up message "Story has been successfully shared !" must be shown to the AH by the application. |
| REQ-8.6.1 | AH must be able to close the pop-up message in REQ-8.6 |
| REQ-8.7 | AH must be able to be redirected back to the "Community Page" after REQ-8.6.1. |

# Non-Functional Requirements

## Performance Requirements

| NREQ-1 | The Application must take a maximum of three (3) seconds to respond to user action. |
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| NREQ-2 | The Application must only perform updates during off-peak hours. |

## Software Quality Attributes

| Tags | Requirement Description |
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| NREQ-3 | The code for the application must be written in a clear and neat manner. |
| NREQ-4 | Description for each function must be included for every function in the form of comments. |